

Binomial relation data

|     | First term | Second term | Relation type |
|-----|------------|-------------|---------------|
| (1) | A          | B           | Yes           |
| (2) | C          | A           | Next          |
| (3) | A          | D           | No            |
| (4) | D          | B           | Next          |
| (5) | B          | E           | Next          |

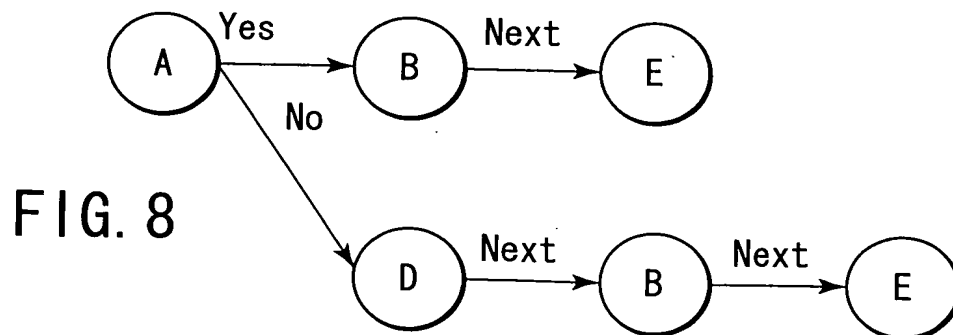
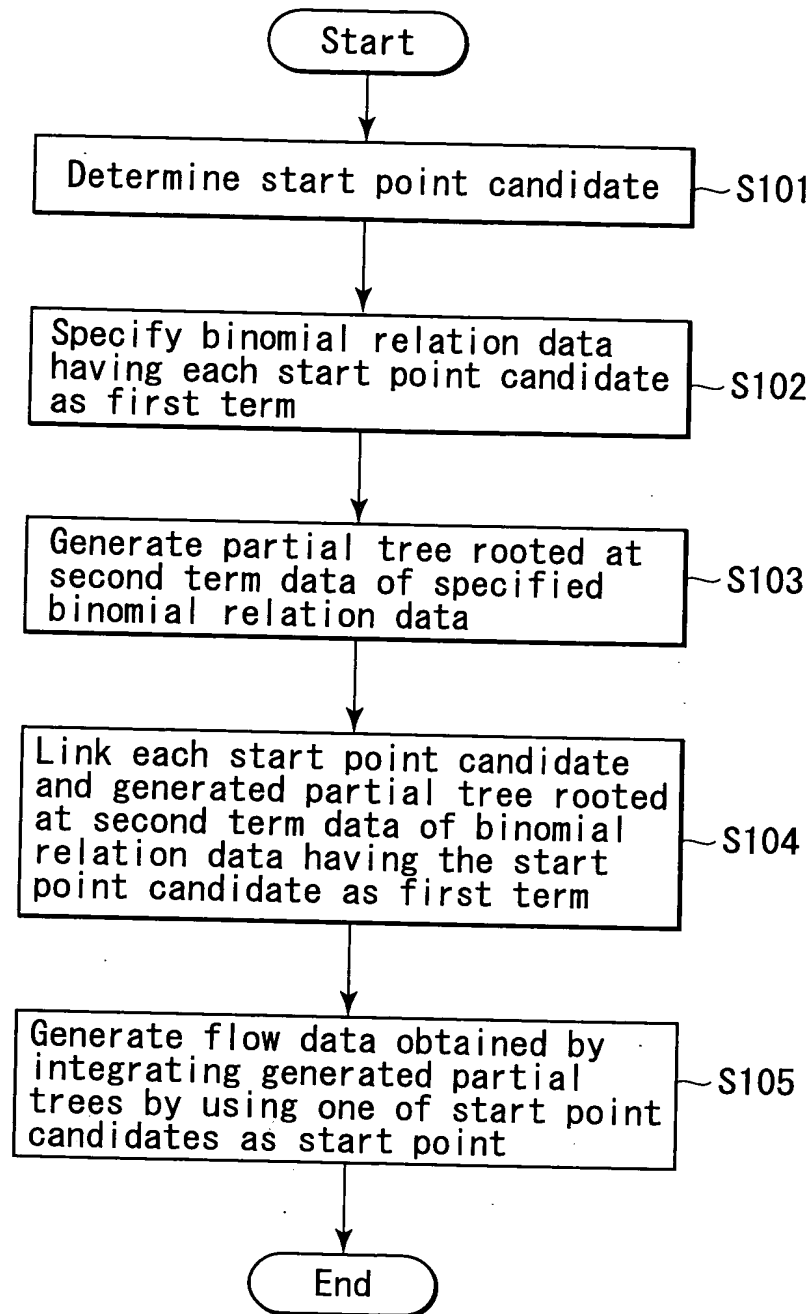
FIG. 2

FIG. 3

| ID | Position data        |
|----|----------------------|
| A  | (1, 1) (2, 2) (3, 1) |
| B  | (1, 2) (4, 2) (5, 1) |
| C  | (2, 1)               |
| D  | (3, 2) (4, 1)        |
| E  | (5, 2)               |

FIG. 4

| ID | Position data        |
|----|----------------------|
| a  | (1, 1) (2, 2) (3, 1) |
| b  | (1, 2) (4, 2) (5, 1) |
| c  | (2, 1)               |
| d  | (3, 2) (4, 1)        |
| e  | (5, 2)               |



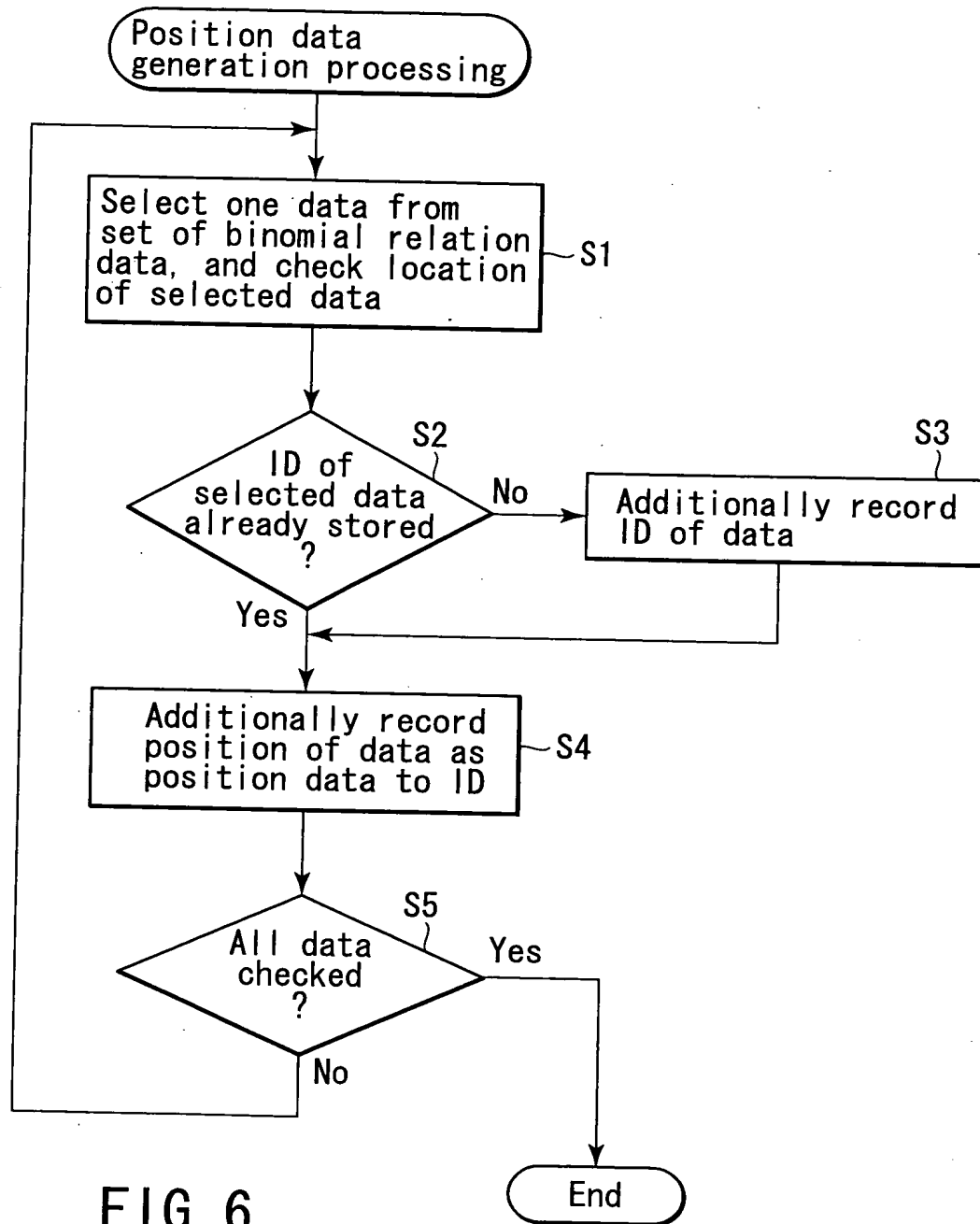


FIG. 6

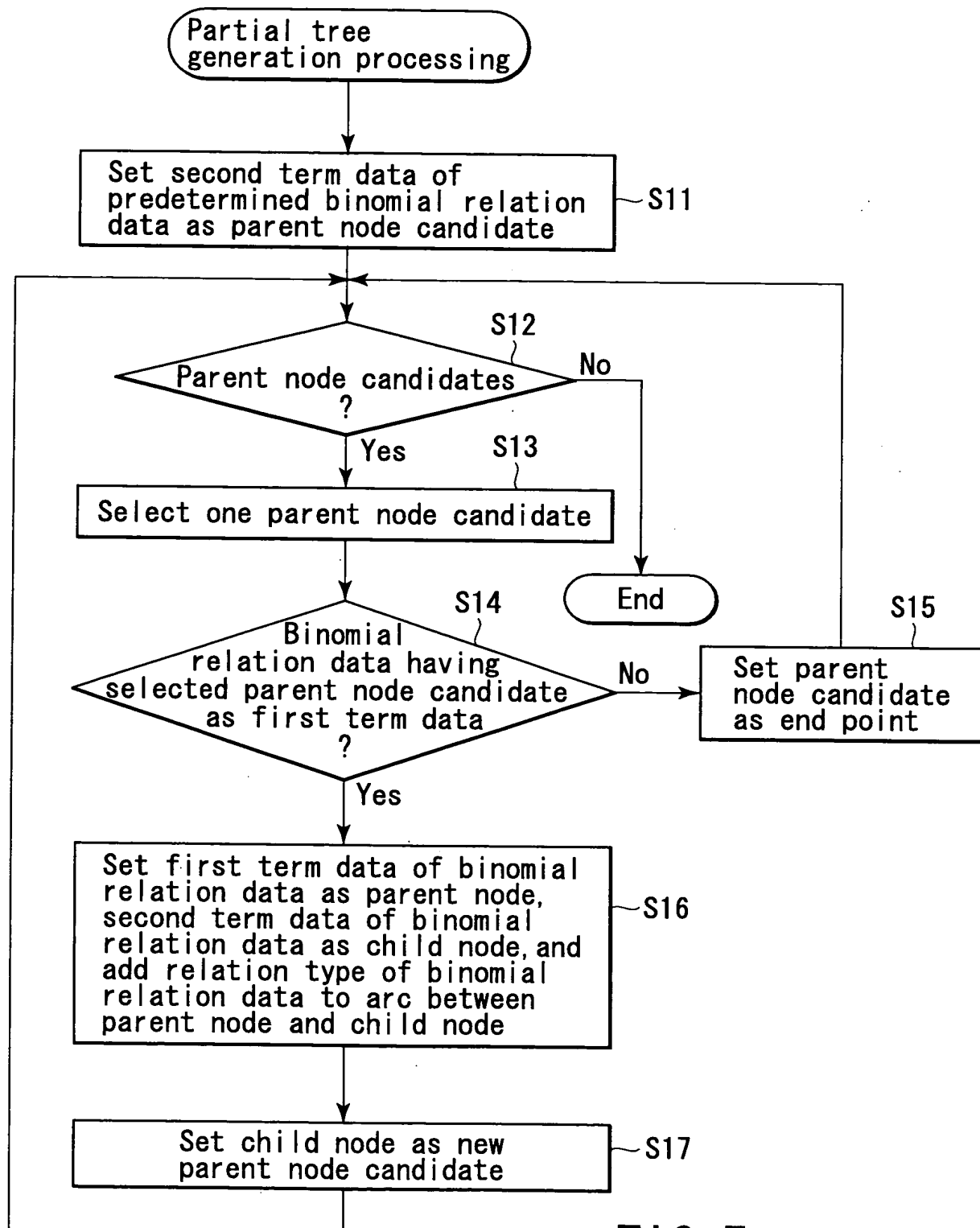


FIG. 7

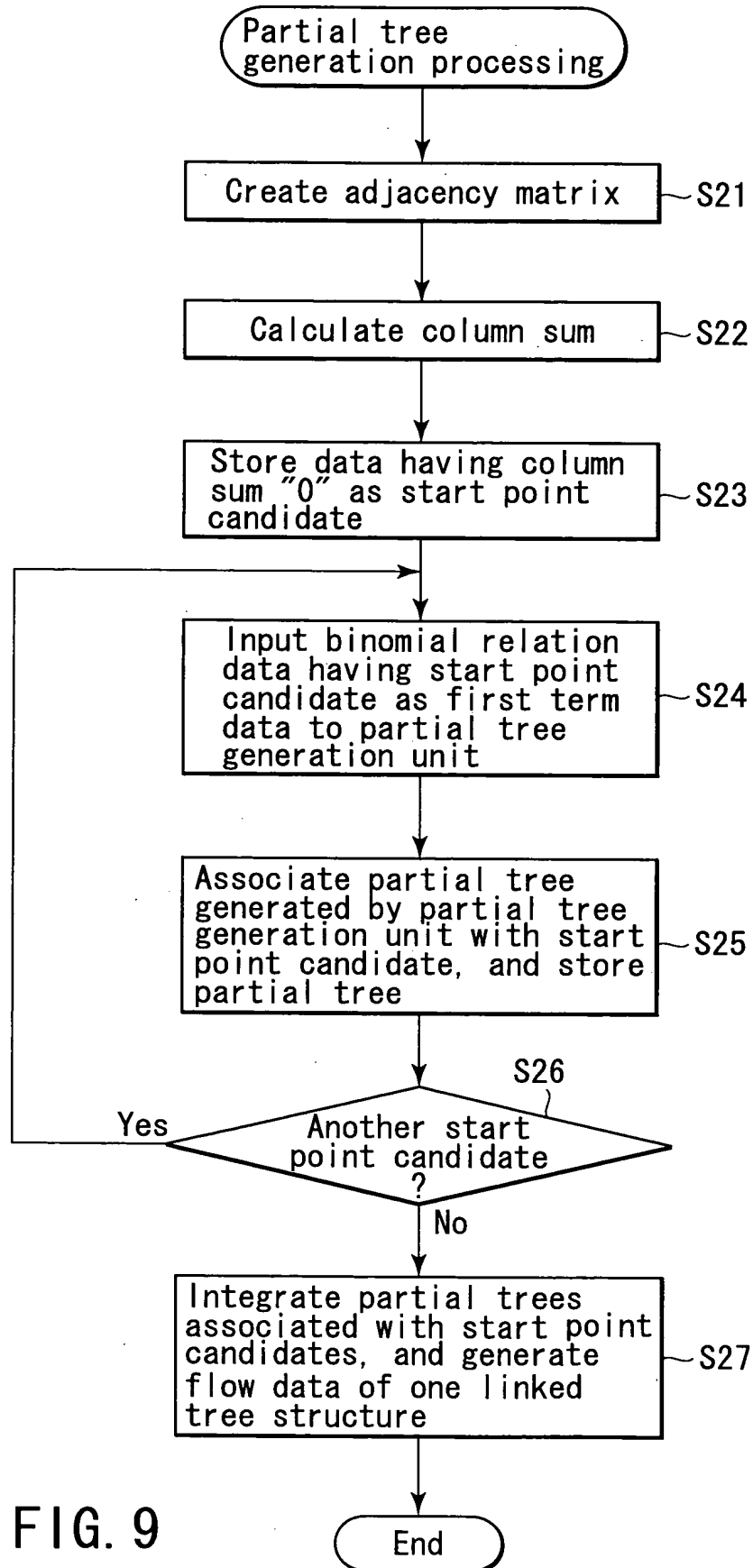
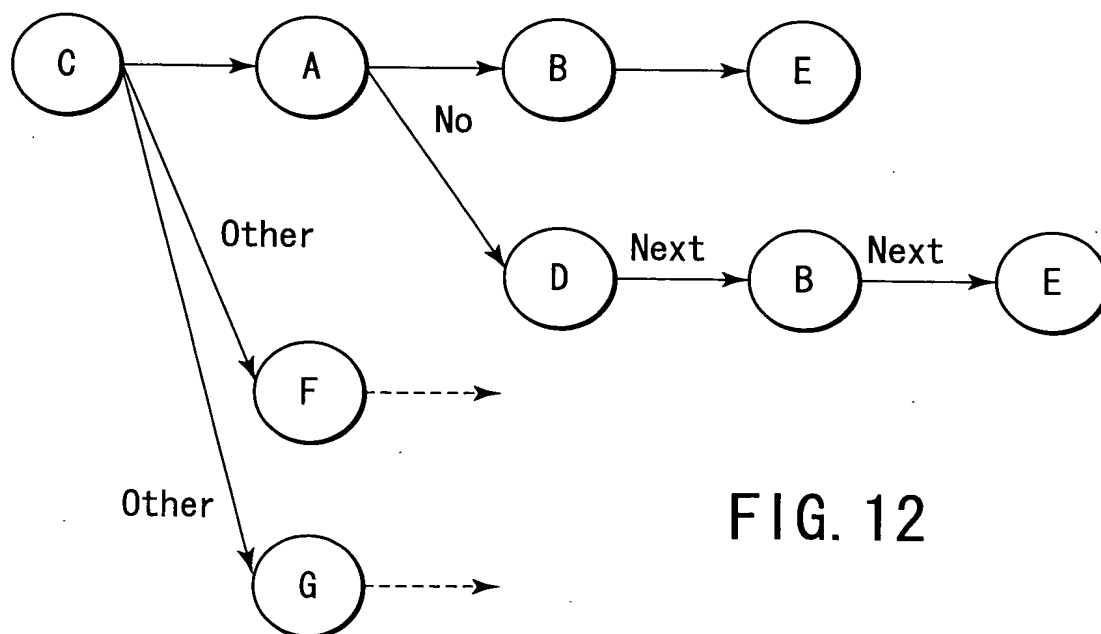
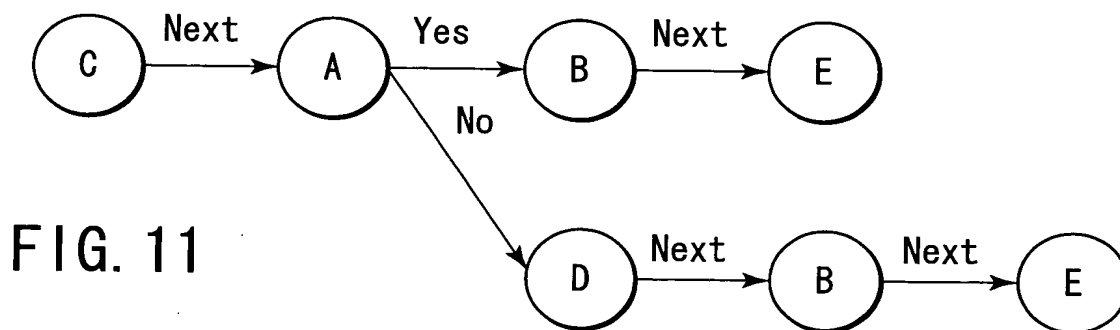
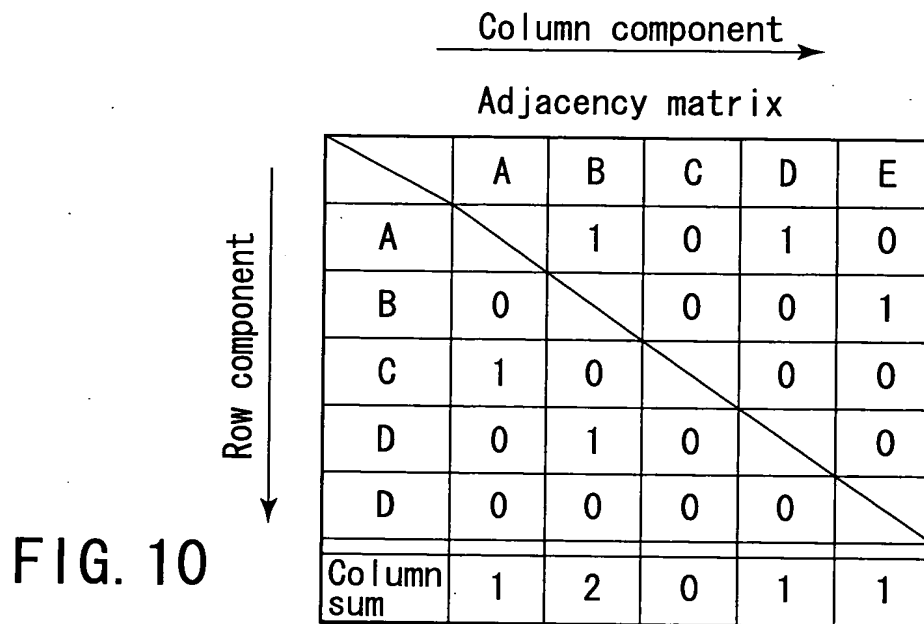


FIG. 9



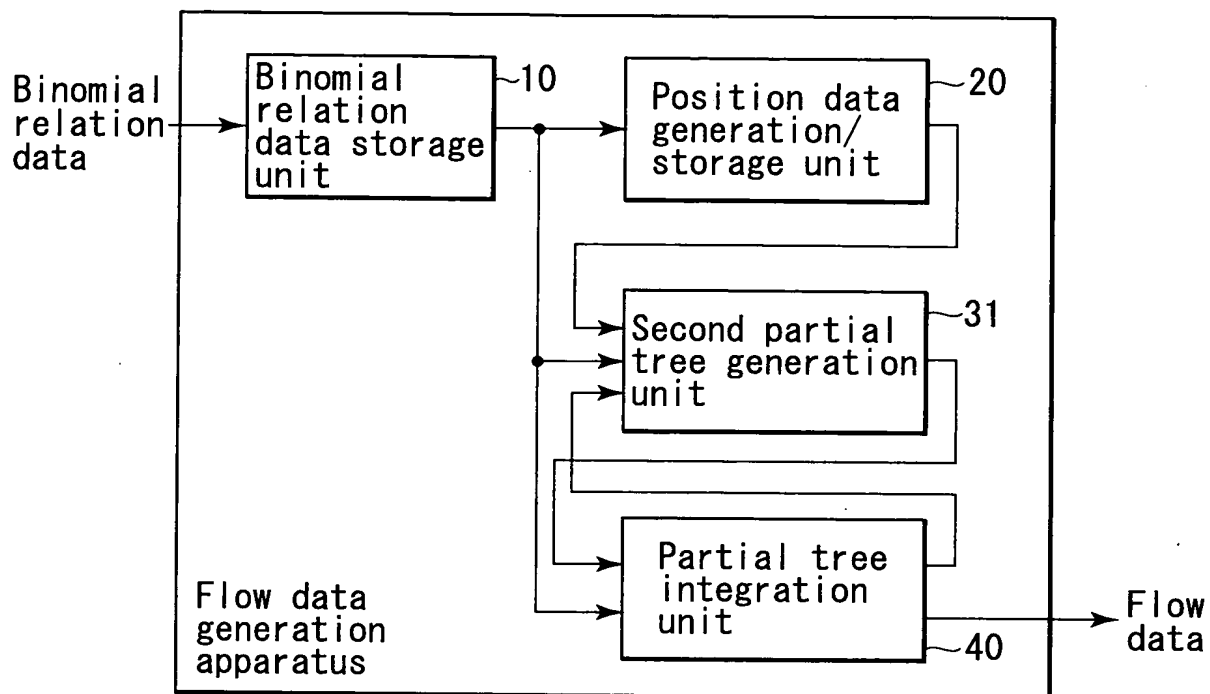


FIG. 13

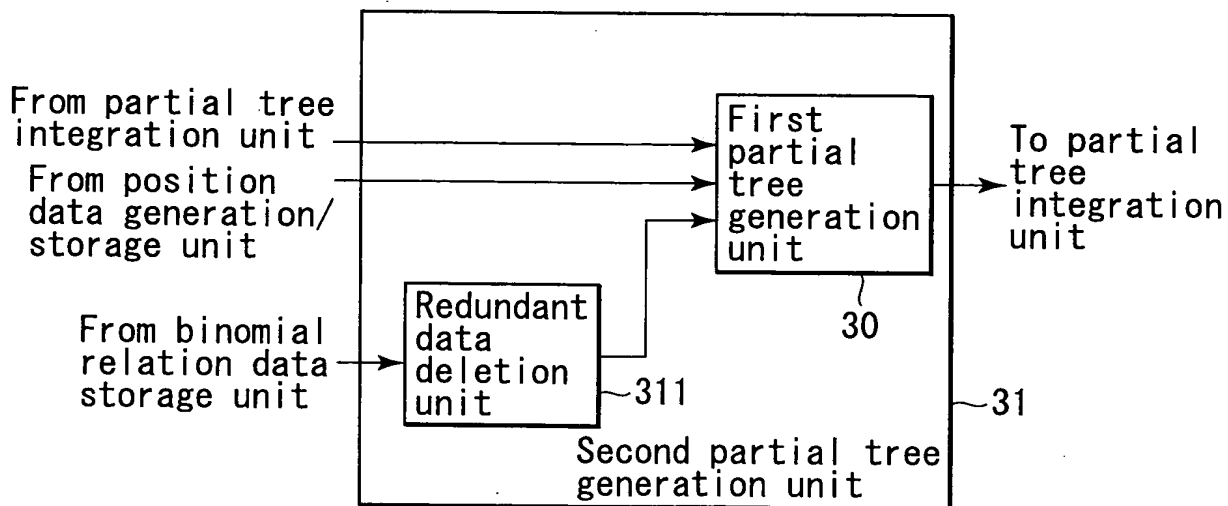


FIG. 14

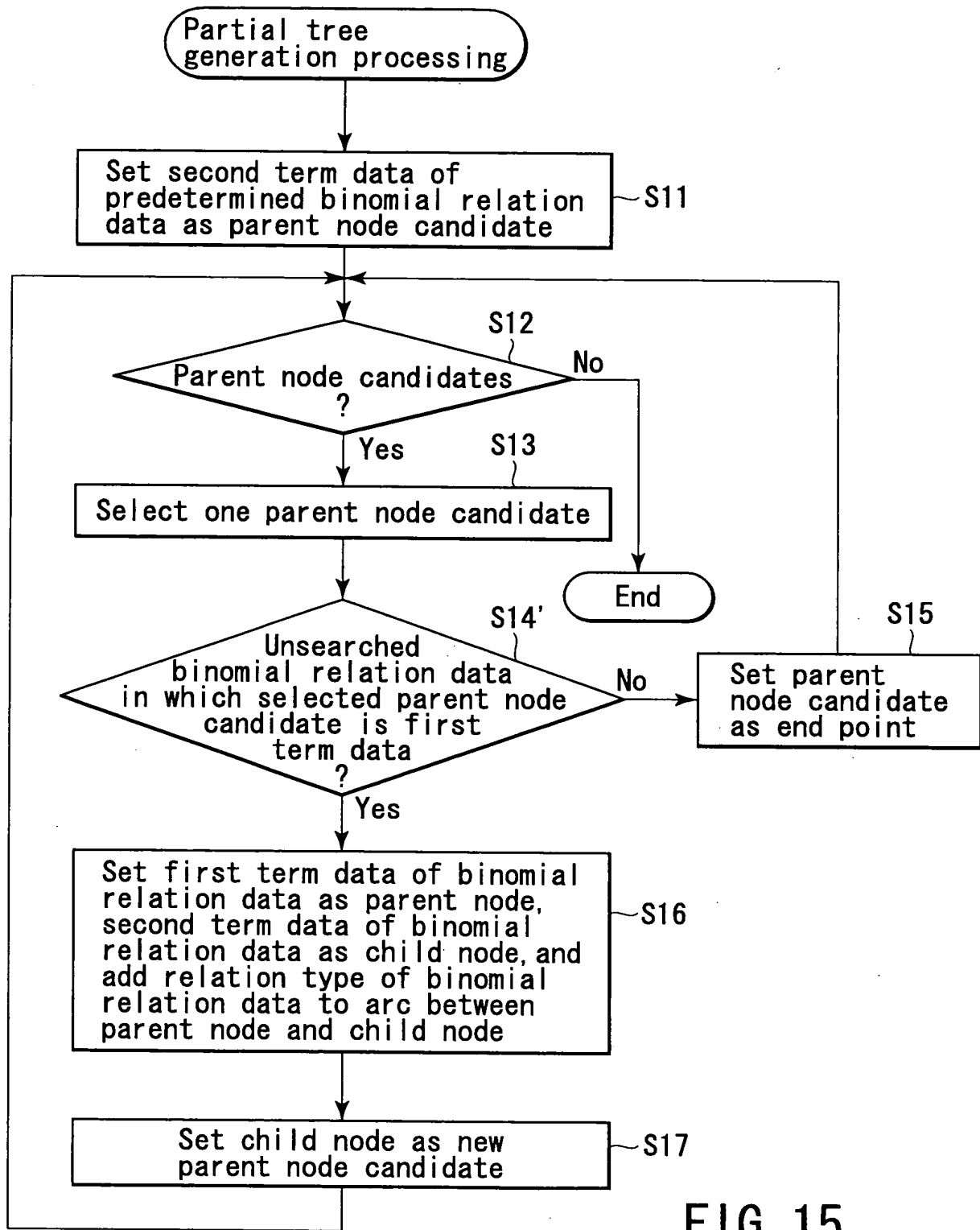
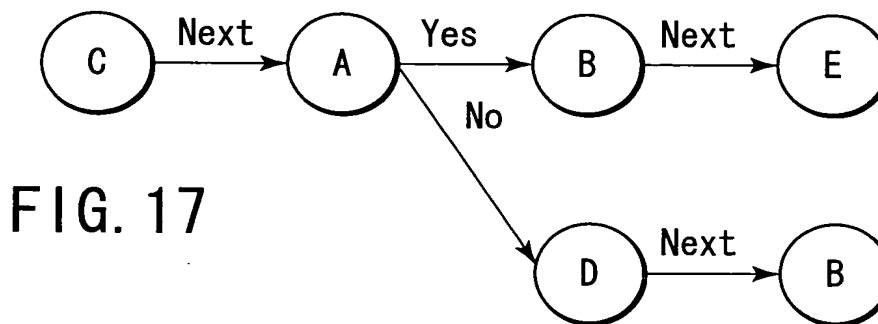
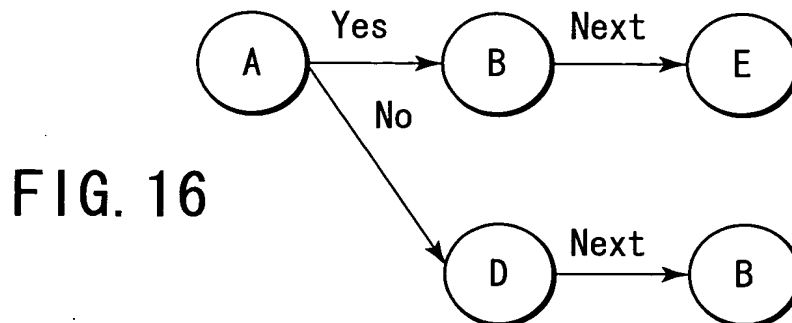


FIG. 15

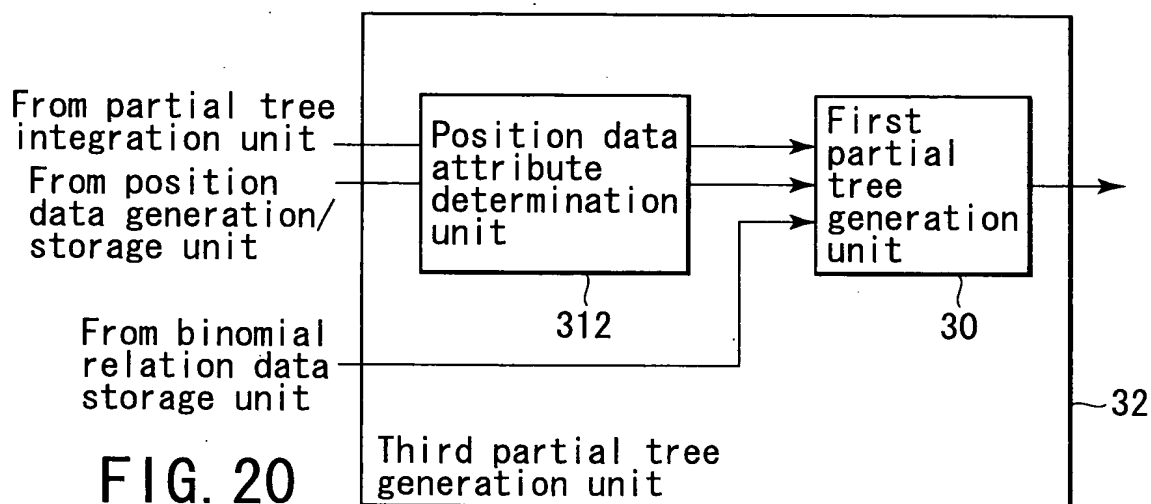
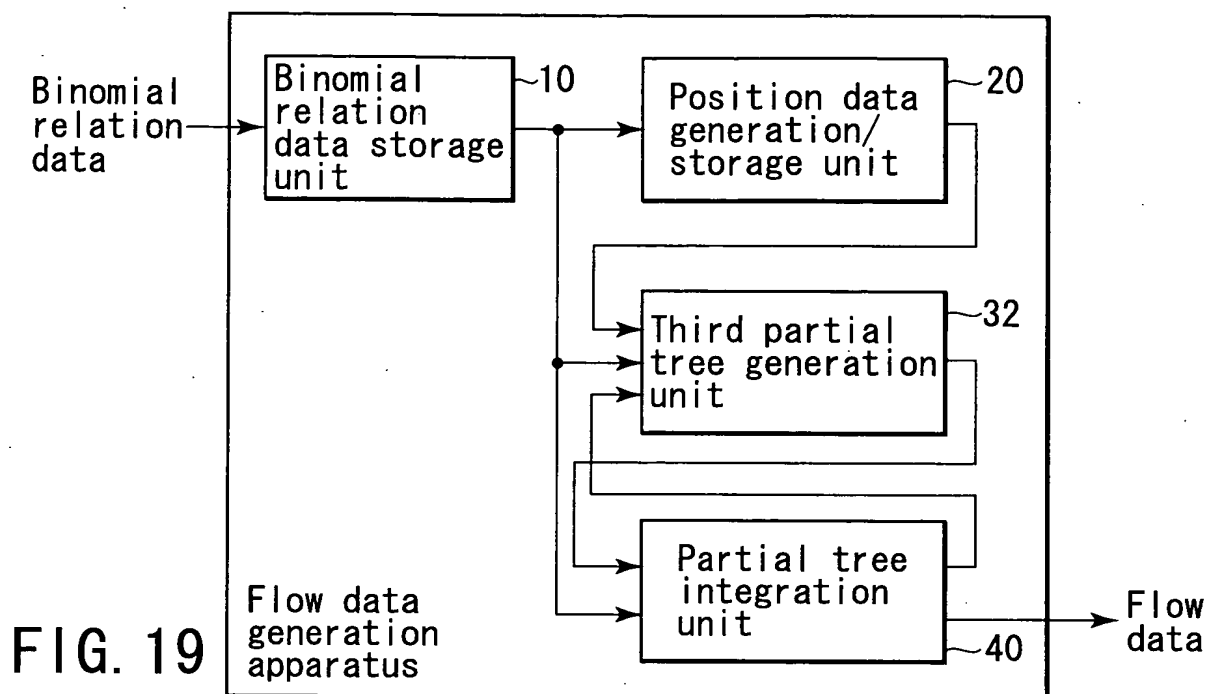




Hierarchical binomial relation data

|     | First term |          |   | Second term |          |   | Relation type |
|-----|------------|----------|---|-------------|----------|---|---------------|
| (1) | I          | $\alpha$ | A | II          | $\beta$  |   | Yes           |
| (2) | I          | $\alpha$ | C | I           | $\alpha$ | A | Next          |
| (3) | I          | $\alpha$ | A | II          | $\beta$  | D | No            |
| (4) | II         | $\beta$  | D | II          | $\beta$  | B | Next          |
| (5) | II         | $\beta$  | B | II          | $\gamma$ | E | Next          |

FIG. 18



**FIG. 21**

| ID |          |   | Position data |        |        |
|----|----------|---|---------------|--------|--------|
| I  | $\alpha$ | A | (1, 1)        | (2, 2) | (3, 1) |
| II | $\beta$  |   | (1, 2)        |        |        |
| II | $\beta$  | B | (4, 2)        | (5, 1) |        |
| I  | $\alpha$ | C | (2, 1)        |        |        |
| II | $\beta$  | D | (3, 2)        | (4, 1) |        |
| II | $\gamma$ | E | (5, 2)        |        |        |

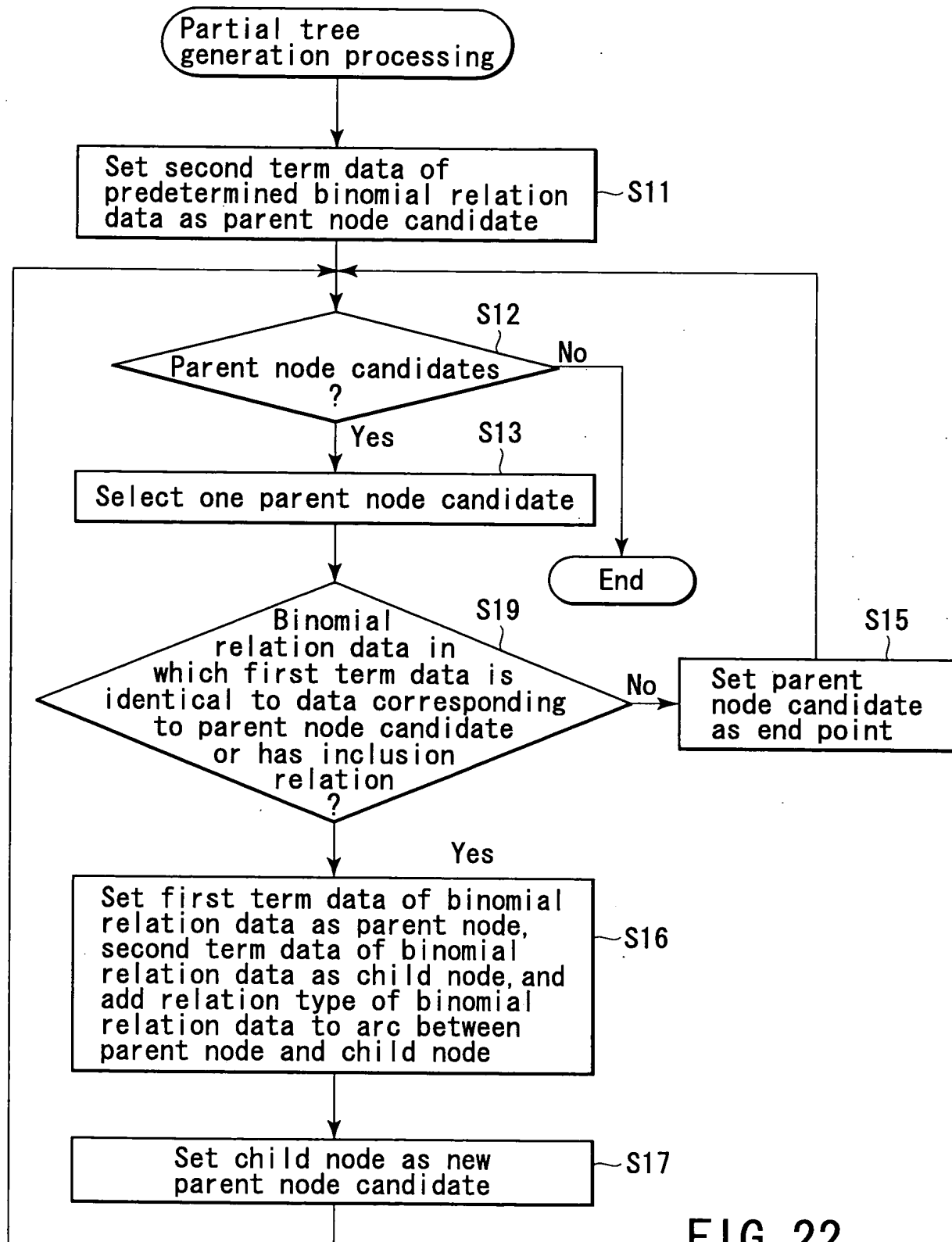
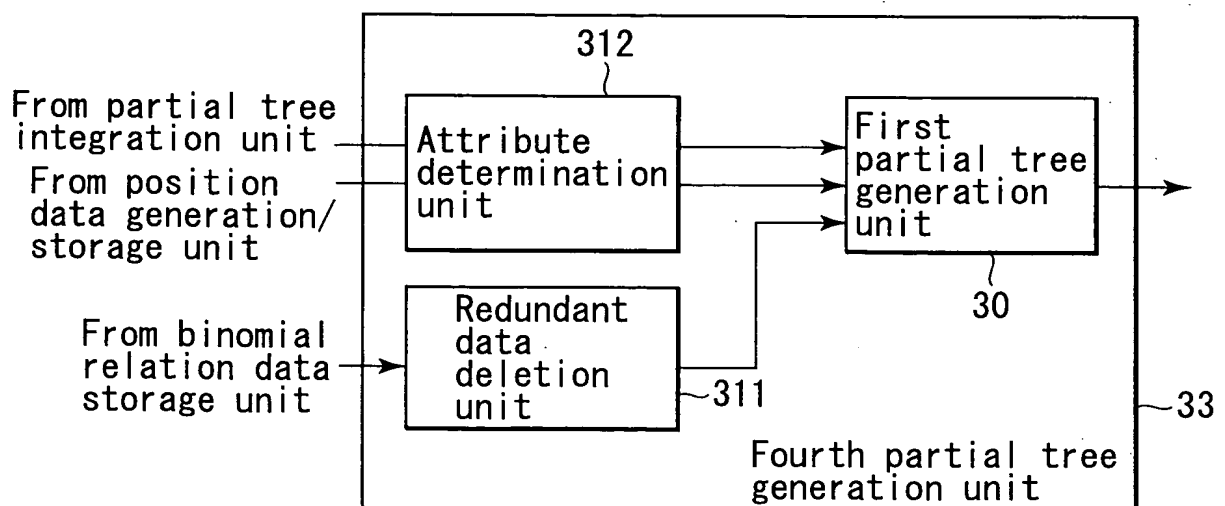
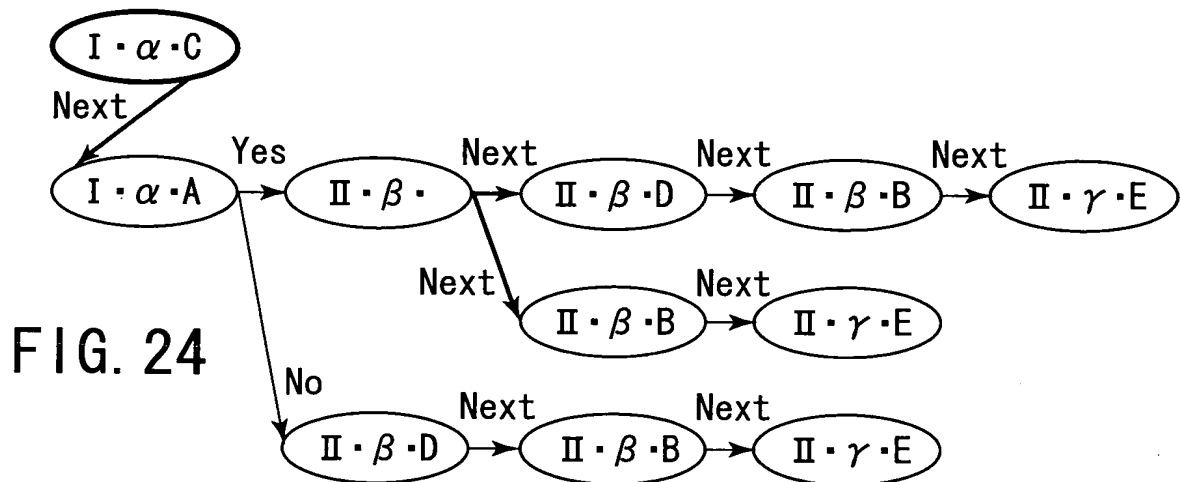
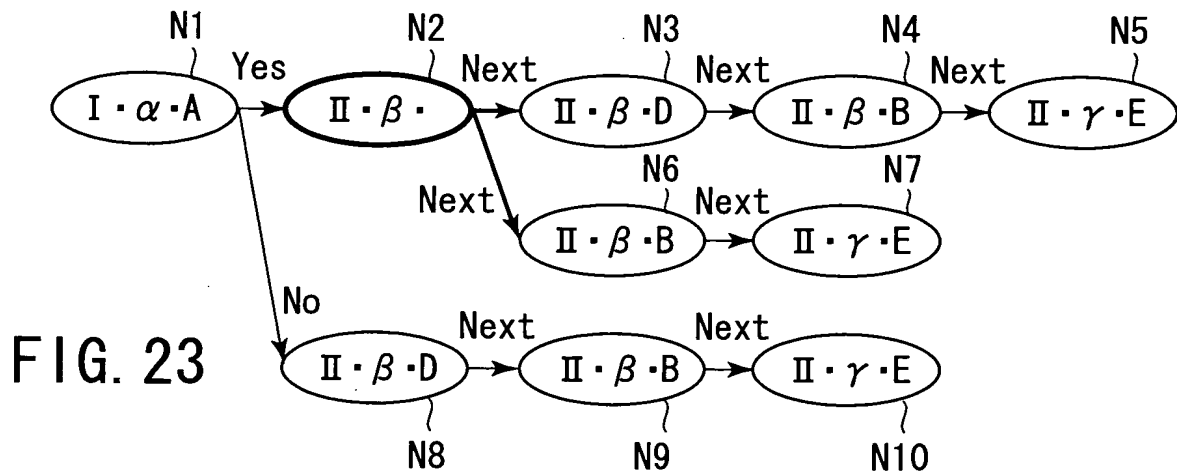
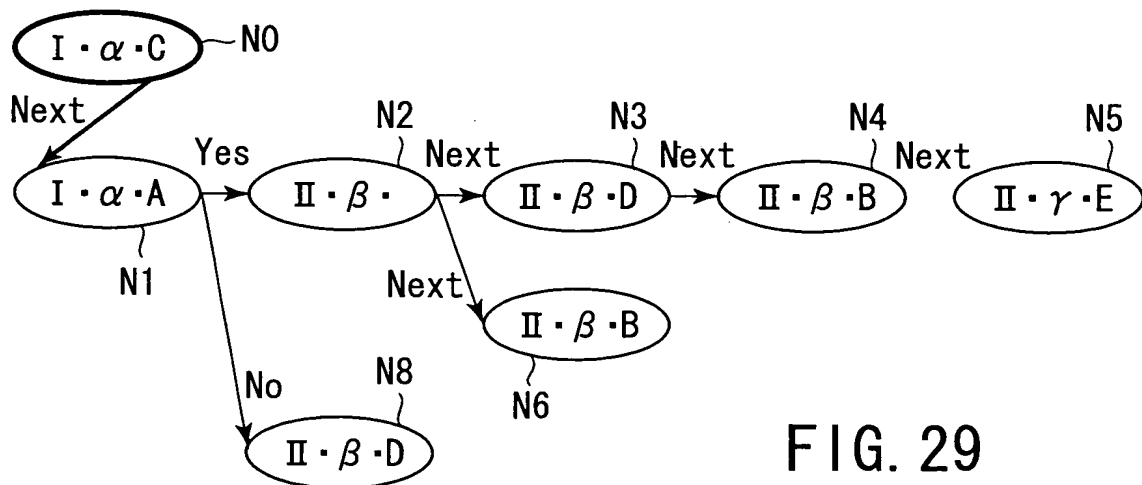
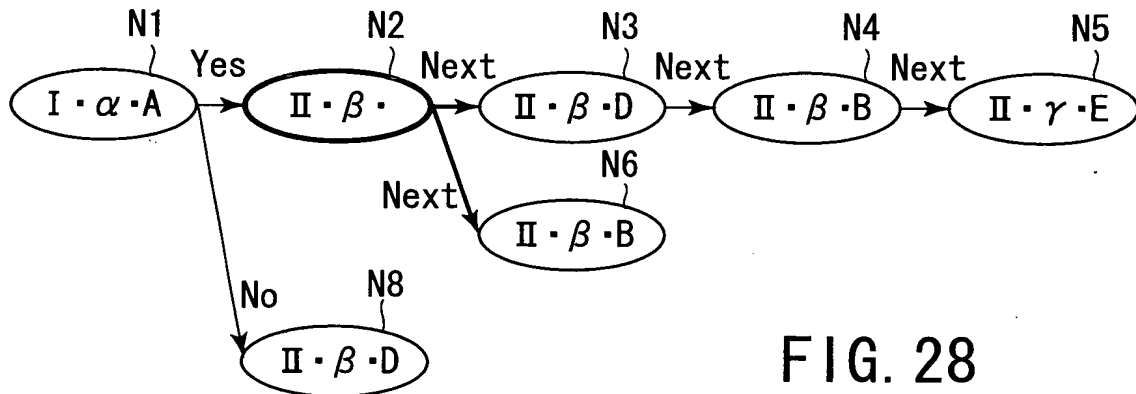
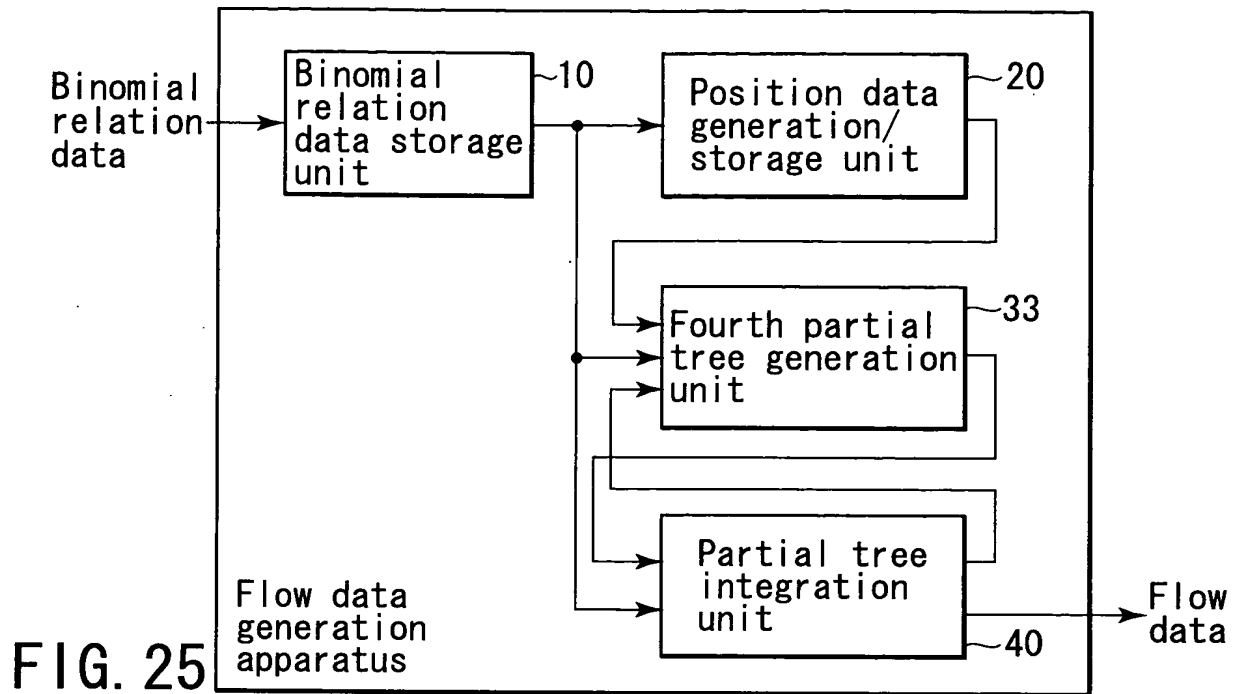


FIG. 22





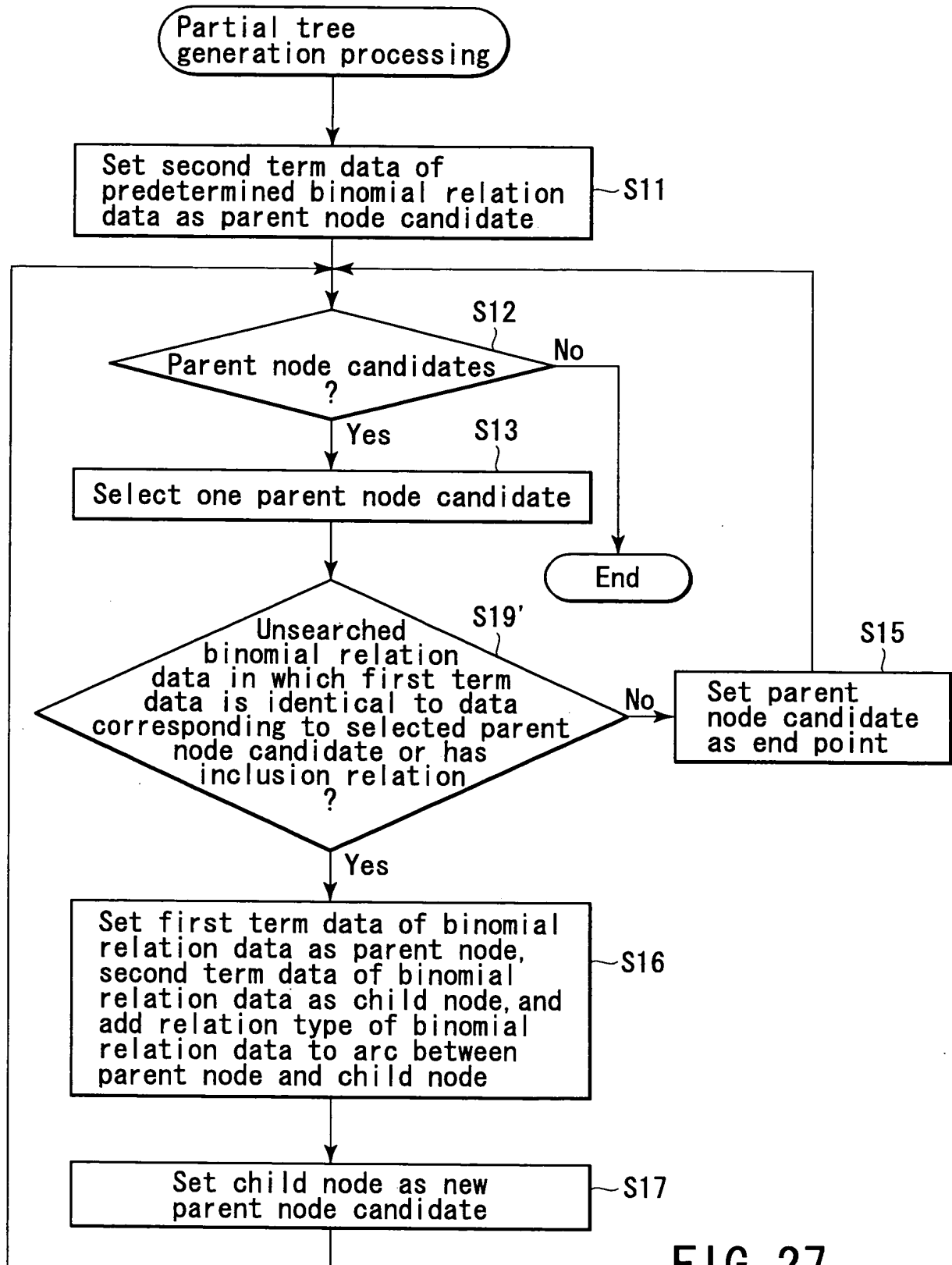


FIG. 27

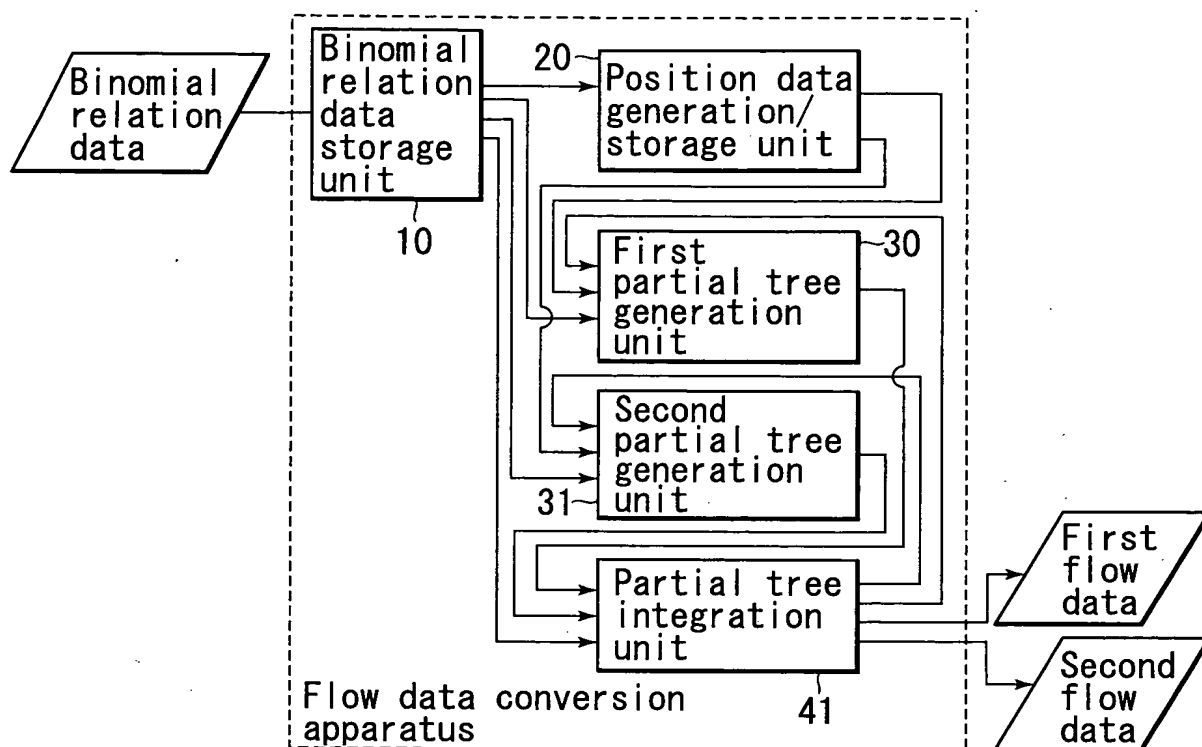


FIG. 30

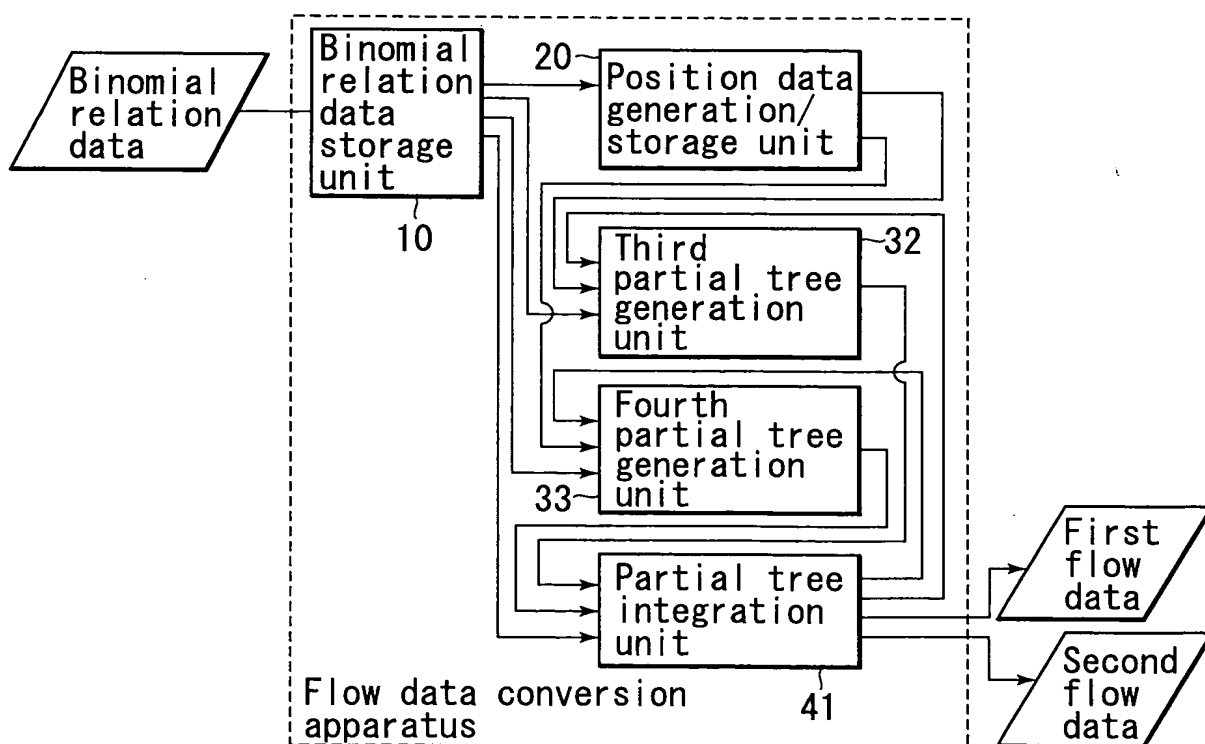


FIG. 31

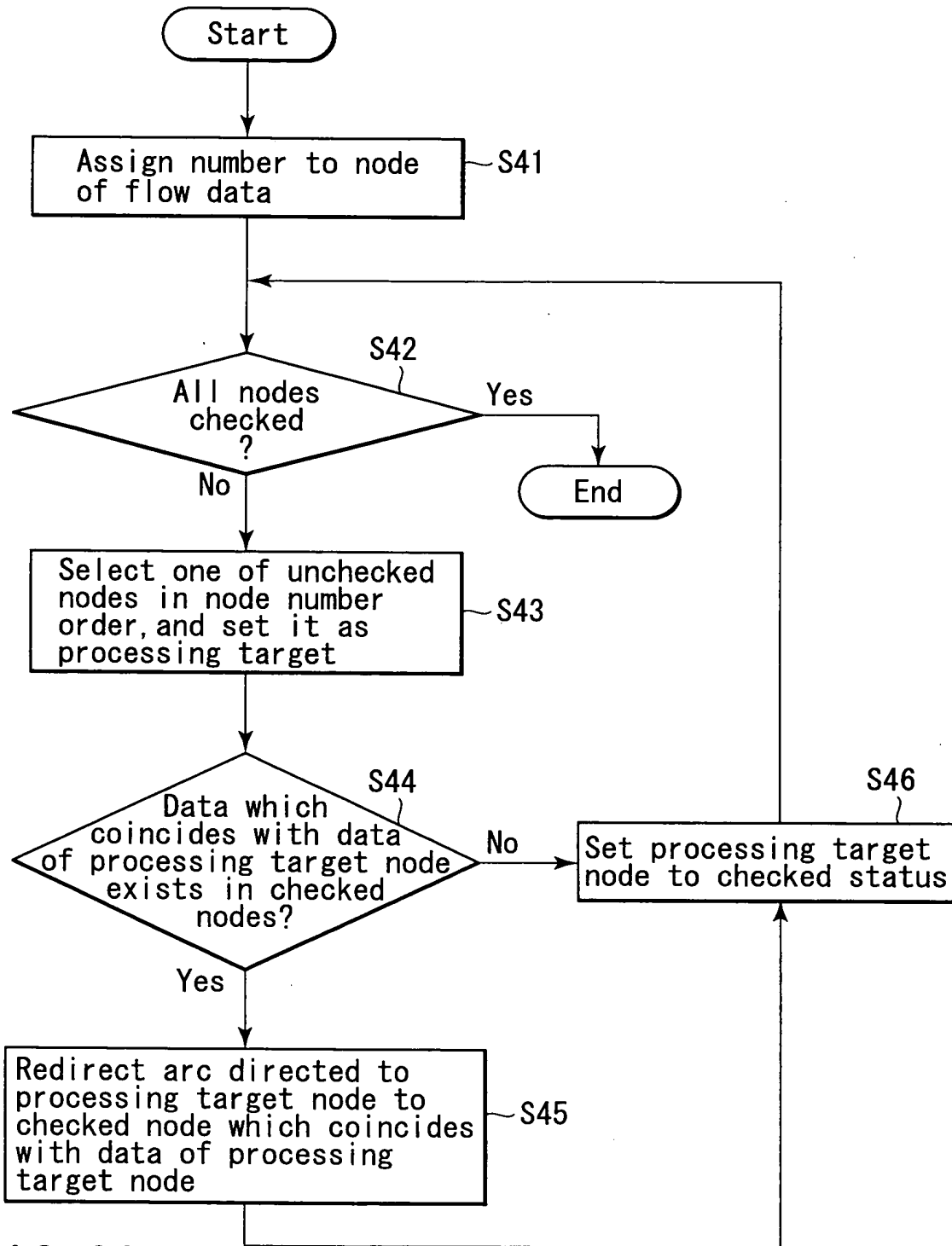
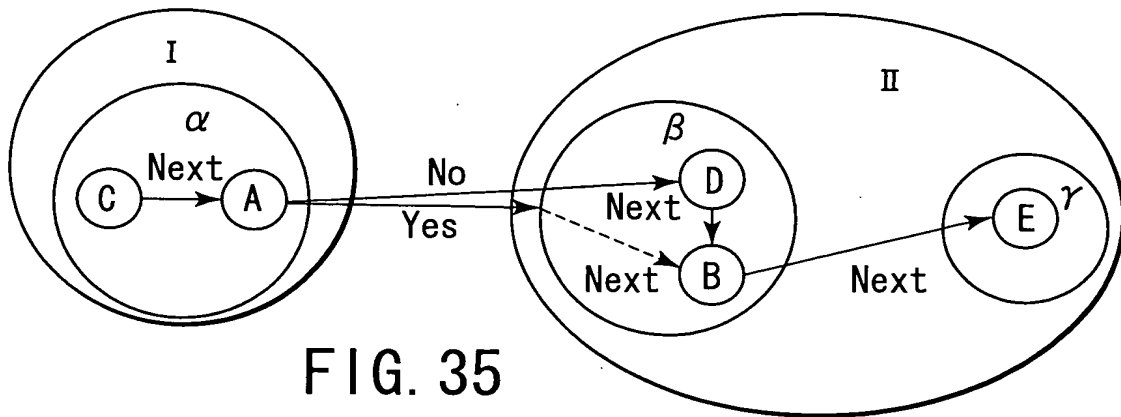
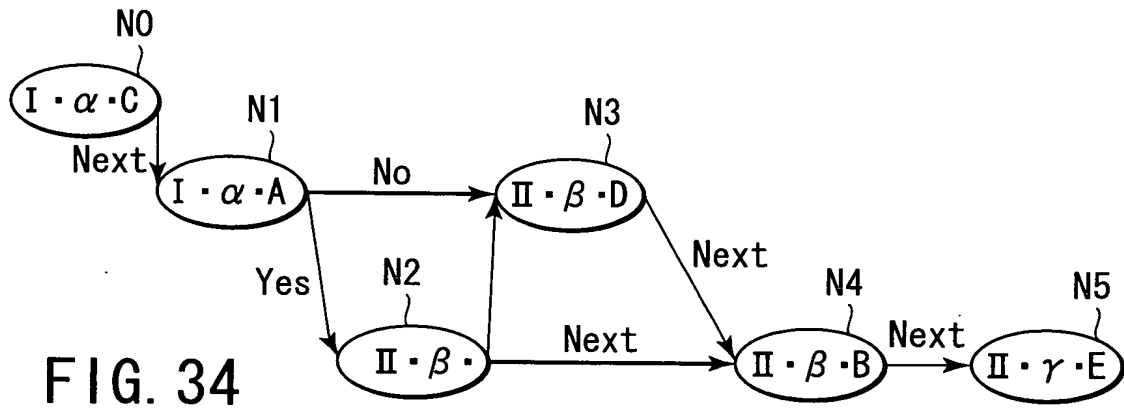
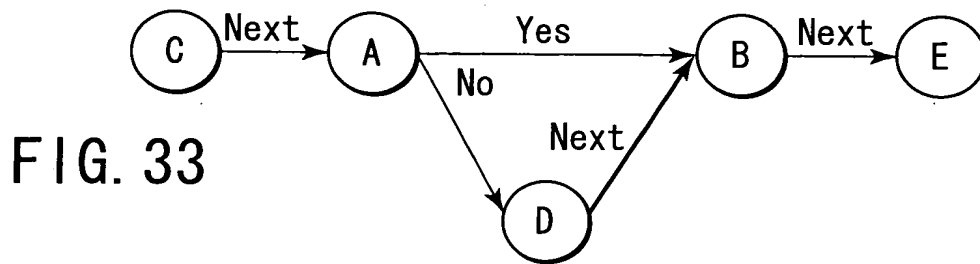


FIG. 32





| 361   |               | 362                    |                          | 363 |  | 364 |  |
|---|---------------|------------------------|--------------------------|-----|--|-----|--|
|   |               |                        |                          |     |  |     |  |
|   |               |                        |                          |     |  |     |  |
|   | A             | B                      | C                        | D   |  |     |  |
| 1   | Broadcast     | Digital                |                          | 1   |  |     |  |
| 2   | Broadcast     | Digital                |                          | 2   |  |     |  |
| 3   | Broadcast     | Analog                 |                          | 3   |  |     |  |
| 4   |               |                        |                          |     |  |     |  |
| 5   | Programming   | Digital recording      |                          | 1   |  |     |  |
| 6   | Digital tuner | Programming procedures | See manual               |     |  |     |  |
| 7   | Digital tuner | Programming procedures | See manual               | 1   |  |     |  |
| 8   |               |                        |                          |     |  |     |  |
| 9   | Programming   | Analog recording       | Individual setting       | 2   |  |     |  |
| 10  | Digital tuner | Playback               | Channel setting          | 2   |  |     |  |
| 11  | Recorder      | Programming procedures |                          | 2   |  |     |  |
| 12  | Recorder      | Programming procedures | Start time setting       | 2   |  |     |  |
| 13  | Recorder      | Programming procedures | End time setting         | 2   |  |     |  |
| 14  | Recorder      | Programming procedures | Mode setting             | 2   |  |     |  |
| 15  | Recorder      | Programming procedures | Mode setting             | 2   |  |     |  |
| 16  |               |                        |                          |     |  |     |  |
| 17  | Programming   | Analog recording       | Programming code setting | 3   |  |     |  |
| 18  | Digital tuner | Playback               | Channel setting          | 3   |  |     |  |
| 19  | Recorder      | Programming procedures |                          | 3   |  |     |  |
| 20  | Recorder      | Programming procedures | Mode setting             | 3   |  |     |  |
| 21  | Recorder      | Programming procedures | Mode setting             | 3   |  |     |  |
| 22  |               |                        |                          |     |  |     |  |
| ◀◀▶▶/File copy/File copy operation/Video recording programming/ |               |                        |                          |     |  |     |  |
| Video recording programming (2)                                 |               |                        |                          |     |  |     |  |

FIG. 36A

FIG. 36A FIG. 36B

FIG. 36

| 365           |  |  | 366                    |  |  | 367                 |  |  |
|---------------|--|--|------------------------|--|--|---------------------|--|--|
| E             |  |  | F                      |  |  | G                   |  |  |
| Programming   |  |  | Digital recording      |  |  |                     |  |  |
| Programming   |  |  | Analog recording       |  |  |                     |  |  |
| Programming   |  |  | Analog recording       |  |  |                     |  |  |
| Digital tuner |  |  | Programming procedures |  |  | See manual          |  |  |
| Digital tuner |  |  | Power                  |  |  | Power need not be   |  |  |
| Recorder      |  |  | Power                  |  |  | turned off          |  |  |
|               |  |  |                        |  |  | Power need not be   |  |  |
|               |  |  |                        |  |  | turned off          |  |  |
| Digital tuner |  |  | Playback               |  |  | Channel setting     |  |  |
| Recorder      |  |  | Programming procedures |  |  |                     |  |  |
| Recorder      |  |  | Programming procedures |  |  | Start time setting  |  |  |
| Recorder      |  |  | Programming procedures |  |  | End time setting    |  |  |
| Recorder      |  |  | Programming procedures |  |  | Mode setting        |  |  |
| Recorder      |  |  | Power                  |  |  | Power is turned off |  |  |
| Digital tuner |  |  | Power                  |  |  | Power is kept on    |  |  |
|               |  |  |                        |  |  |                     |  |  |
| Digital tuner |  |  | Playback               |  |  | Channel setting     |  |  |
| Recorder      |  |  | Programming procedures |  |  |                     |  |  |
| Recorder      |  |  | Programming procedures |  |  | Mode setting        |  |  |
| Recorder      |  |  | Power                  |  |  | Power is turned off |  |  |
| Digital tuner |  |  | Power                  |  |  | Power is kept on    |  |  |

FIG. 36B

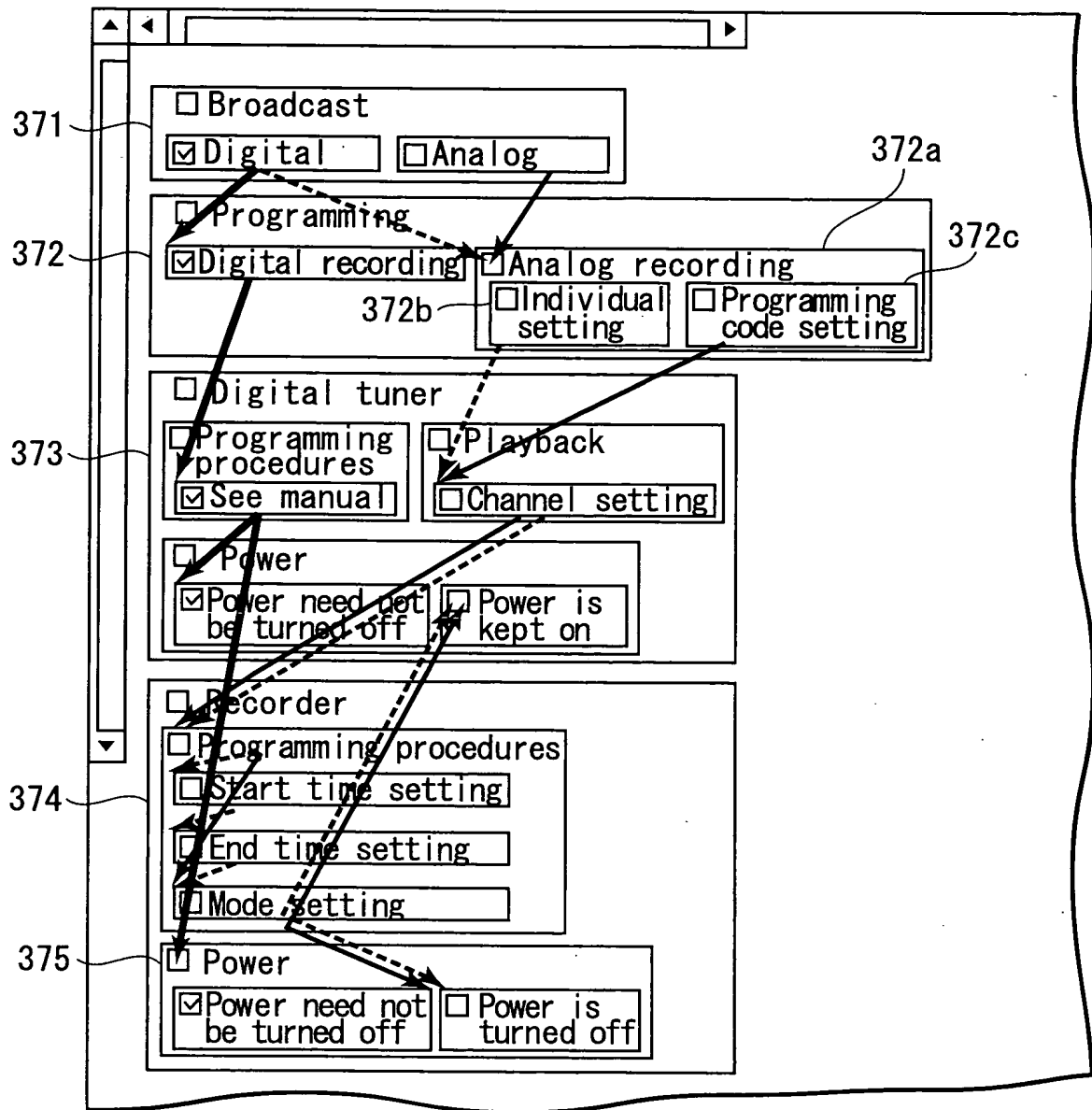


FIG. 37

| 381   |               |  |  | 382 |                        |  |  | 383 |                            |  |  | 384 |   |  |  |  |
|---|---------------|--|--|-----|------------------------|--|--|-----|----------------------------|--|--|-----|---|--|--|--|
|   |               |  |  |     |                        |  |  |     |                            |  |  |     |   |  |  |  |
|   | A             |  |  |     | B                      |  |  |     | C                          |  |  |     | D |  |  |  |
| 1   | Broadcast     |  |  |     | Digital                |  |  |     |                            |  |  |     | 1 |  |  |  |
| 2   | Broadcast     |  |  |     | Digital                |  |  |     |                            |  |  |     | 2 |  |  |  |
| 3   | Broadcast     |  |  |     | Analog                 |  |  |     |                            |  |  |     | 3 |  |  |  |
| 4   |               |  |  |     |                        |  |  |     |                            |  |  |     |   |  |  |  |
| 5   | Programming   |  |  |     | Digital recording      |  |  |     |                            |  |  |     | 1 |  |  |  |
| 6   | Digital tuner |  |  |     | Programming procedures |  |  |     | See manual                 |  |  |     | 1 |  |  |  |
| 7   | Digital tuner |  |  |     | Programming procedures |  |  |     | See manual                 |  |  |     | 1 |  |  |  |
| 8   |               |  |  |     |                        |  |  |     |                            |  |  |     |   |  |  |  |
| 9   | Programming   |  |  |     | Analog recording       |  |  |     | Individual setting         |  |  |     | 2 |  |  |  |
| 10  | Digital tuner |  |  |     | Playback               |  |  |     | Channel setting            |  |  |     | 2 |  |  |  |
| 11  | Recorder      |  |  |     | Programming procedures |  |  |     |                            |  |  |     | 2 |  |  |  |
| 12  | Recorder      |  |  |     | Programming procedures |  |  |     | Start time setting         |  |  |     | 2 |  |  |  |
| 13  | Recorder      |  |  |     | Programming procedures |  |  |     | End time setting           |  |  |     | 2 |  |  |  |
| 14  | Recorder      |  |  |     | Programming procedures |  |  |     | Mode setting               |  |  |     | 2 |  |  |  |
| 15  | Recorder      |  |  |     | Programming procedures |  |  |     | Mode setting               |  |  |     | 2 |  |  |  |
| 16  |               |  |  |     |                        |  |  |     |                            |  |  |     |   |  |  |  |
| 17  | ? Delete      |  |  |     |                        |  |  |     |                            |  |  |     |   |  |  |  |
| 18  | ? Programming |  |  |     | Analog recording       |  |  |     | Programming code setting   |  |  |     | 3 |  |  |  |
| 19  | Digital tuner |  |  |     | Playback               |  |  |     | Channel setting            |  |  |     | 3 |  |  |  |
| 20  | ? Recorder    |  |  |     | Programming procedures |  |  |     |                            |  |  |     | 3 |  |  |  |
| 21  | ? Recorder    |  |  |     | Programming procedures |  |  |     | Mode setting               |  |  |     | 3 |  |  |  |
| 22  | ? Recorder    |  |  |     | Programming procedures |  |  |     | Mode setting               |  |  |     | 3 |  |  |  |
| 23  |               |  |  |     |                        |  |  |     |                            |  |  |     |   |  |  |  |
| 24  | ? Add         |  |  |     |                        |  |  |     |                            |  |  |     |   |  |  |  |
| 25  | Programming   |  |  |     | Analog recording       |  |  |     | Remote control programming |  |  |     | 4 |  |  |  |
| 26  | Digital tuner |  |  |     | Playback               |  |  |     | Channel setting            |  |  |     | 4 |  |  |  |
| 27  | Recorder      |  |  |     | Programming procedures |  |  |     | Remote controller          |  |  |     | 4 |  |  |  |
| 28  | Recorder      |  |  |     | Programming procedures |  |  |     | Remote controller          |  |  |     | 4 |  |  |  |
| 29  |               |  |  |     |                        |  |  |     |                            |  |  |     |   |  |  |  |
| 30  | Programming   |  |  |     | Analog recording       |  |  |     | Quick programming          |  |  |     | 5 |  |  |  |
| 31  | Digital tuner |  |  |     | Playback               |  |  |     | Channel setting            |  |  |     | 5 |  |  |  |
| 32  | Recorder      |  |  |     | Programming procedures |  |  |     | Quick                      |  |  |     | 5 |  |  |  |
| 33  | Recorder      |  |  |     | Programming procedures |  |  |     | Quick                      |  |  |     | 5 |  |  |  |
| 34  |               |  |  |     |                        |  |  |     |                            |  |  |     |   |  |  |  |
| 35  |               |  |  |     |                        |  |  |     |                            |  |  |     |   |  |  |  |
| ◀◀▶▶◀File copy◀File copy operation◀Video recording programming◀ |               |  |  |     |                        |  |  |     |                            |  |  |     |   |  |  |  |

FIG. 38A

Video recording programming (2)

FIG. 38B

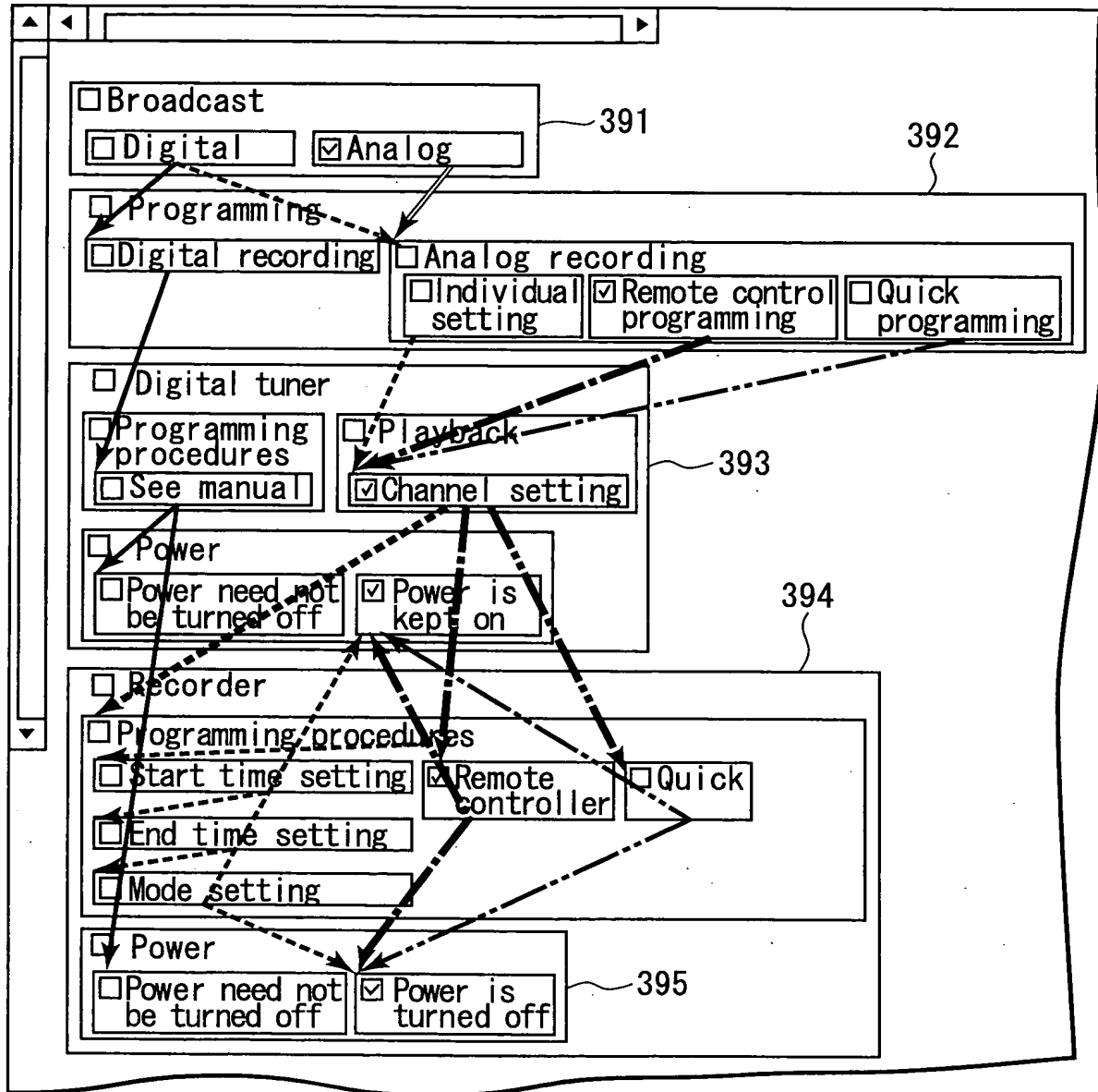


FIG. 39

| 401   |                       |  | 402                   |  |  | 403 |                          |  | 404 |  |                       | 405 |  |  | 406 |  |         | 407 |  |  |
|---|-----------------------|--|-----------------------|--|--|-----|--------------------------|--|-----|--|-----------------------|-----|--|--|-----|--|---------|-----|--|--|
| A   |                       |  | B                     |  |  | C   |                          |  | D   |  |                       | E   |  |  | F   |  |         | G   |  |  |
| 1   | Icon of file 1        |  | Highlight             |  |  | 2   | 1) Icon of file 1        |  |     |  | Highlight             |     |  |  |     |  |         |     |  |  |
| 2   | Icon of file 1        |  | Keep Ctrl key pressed |  |  | 1   | 2) Icon of file 2        |  |     |  | Keep Ctrl key pressed |     |  |  |     |  | Click   |     |  |  |
| 3   |                       |  | Highlight             |  |  | 2   | 2) Icon of file 2        |  |     |  | Highlight             |     |  |  |     |  |         |     |  |  |
| 4   | Icon of file 2        |  | Keep Ctrl key pressed |  |  | 1   | 3) Icon of file 3        |  |     |  | Keep Ctrl key pressed |     |  |  |     |  | Click   |     |  |  |
| 5   | Icon of file 2        |  | Highlight             |  |  | 2   | 3) Icon of file 3        |  |     |  | Highlight             |     |  |  |     |  |         |     |  |  |
| 6   |                       |  | Keep Ctrl key pressed |  |  | 1   | 4) Icons of files 1 to 3 |  |     |  | Highlight             |     |  |  |     |  |         |     |  |  |
| 7   | Icon of file 3        |  | Highlight             |  |  | 2   | 4) Icons of files 1 to 3 |  |     |  | Mouse                 |     |  |  |     |  | Keep    |     |  |  |
| 8   | Icon of file 3        |  |                       |  |  | 1   | 5) Folder                |  |     |  | Mouse                 |     |  |  |     |  | Drag    |     |  |  |
| 9   |                       |  |                       |  |  | 2   | 6) Completion of copying |  |     |  | Mouse                 |     |  |  |     |  | Release |     |  |  |
| 10  | Icons of files 1 to 3 |  | Highlight             |  |  | 1   | 4) Icons of files 1 to 3 |  |     |  | Mouse                 |     |  |  |     |  |         |     |  |  |
| 11  | Icons of files 1 to 3 |  | Mouse                 |  |  | 2   | 4) Icons of files 1 to 3 |  |     |  | Mouse                 |     |  |  |     |  |         |     |  |  |
| 12  | Icons of files 1 to 3 |  | Mouse                 |  |  | 2   | 5) Folder                |  |     |  | Highlight             |     |  |  |     |  |         |     |  |  |
| 13  |                       |  |                       |  |  | 1   | 4) Icons of files 1 to 3 |  |     |  | Mouse                 |     |  |  |     |  |         |     |  |  |
| 14  | Folder                |  | Highlight             |  |  | 2   | 6) Completion of copying |  |     |  | Mouse                 |     |  |  |     |  |         |     |  |  |
| 15  | Icons of files 1 to 3 |  | Mouse                 |  |  | 1   | 4) Icons of files 1 to 3 |  |     |  | Mouse                 |     |  |  |     |  |         |     |  |  |
| 16  | Click                 |  |                       |  |  | 2   | 6) Completion of copying |  |     |  | Mouse                 |     |  |  |     |  |         |     |  |  |
| 17  |                       |  |                       |  |  |     |                          |  |     |  |                       |     |  |  |     |  |         |     |  |  |
| File copy/File copy operation/Video recording programming |                       |  | Car                   |  |  |     |                          |  |     |  |                       |     |  |  |     |  |         |     |  |  |

Video recording programming (2)

FIG. 40



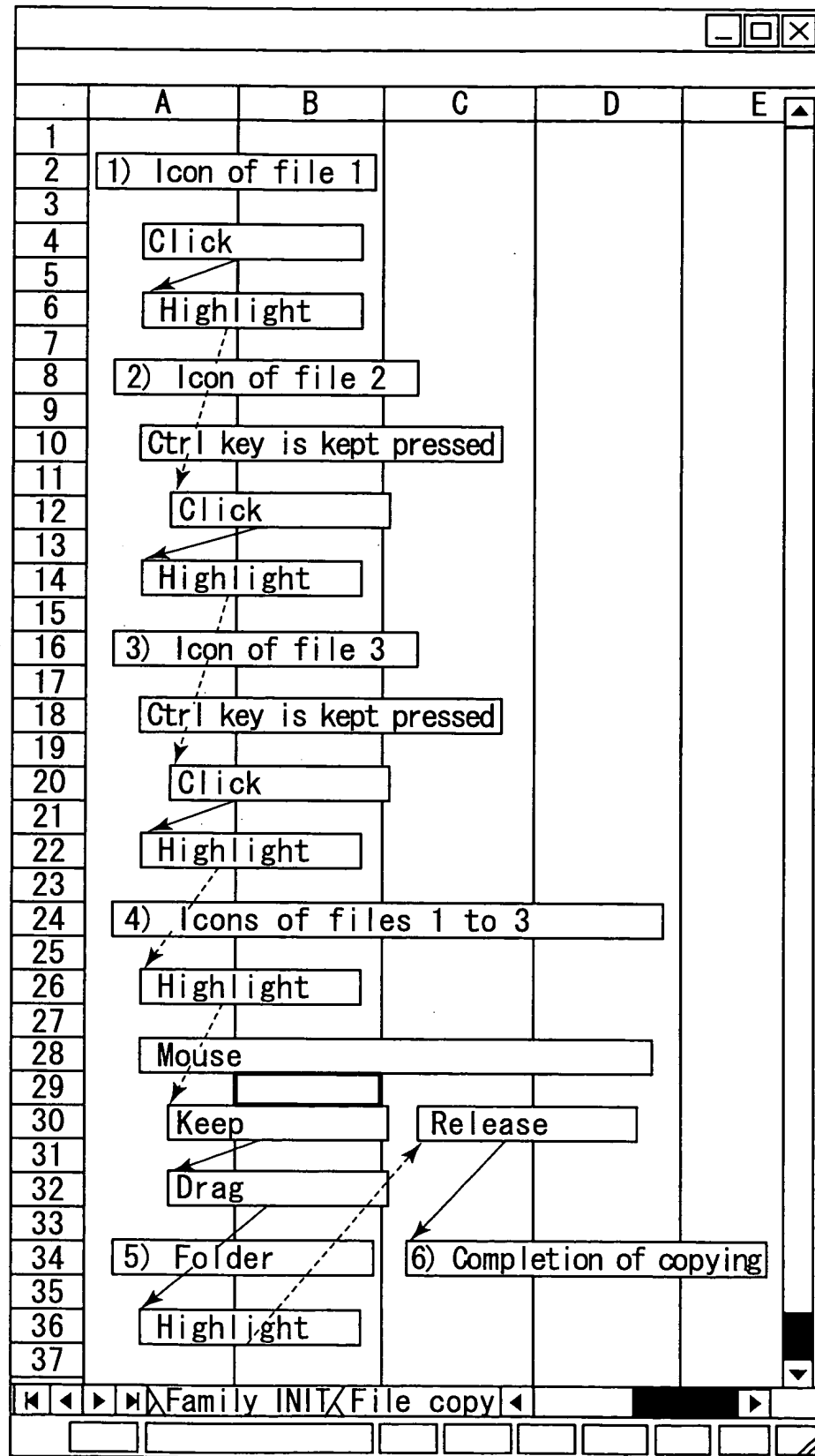


FIG. 41

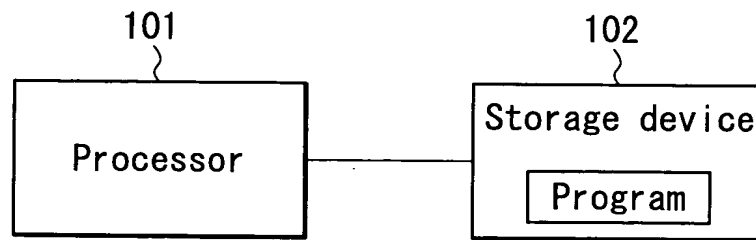


FIG. 42A

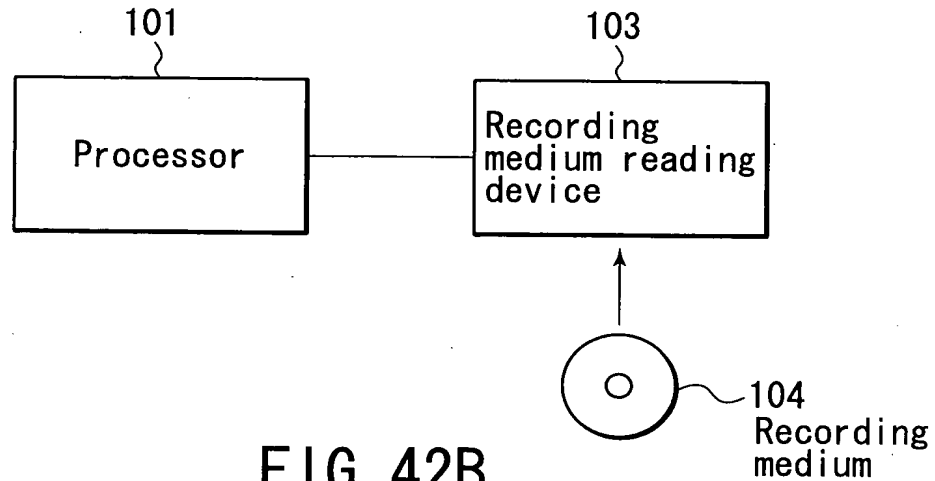


FIG. 42B